

CLAIMS

1. A pluggable transceiver comprising:

a housing having a front wall defining a receptacle for receiving a fiber optic connector; and

a release mechanism including a locking member rotatably connected to the housing, the locking member including a lever extending from the front wall of the housing, and an engaging portion fixedly connected to the lever,

wherein the locking member is arranged such that when the lever is rotated into a first position, the lever blocks at least a portion of the receptacle to prevent insertion of the fiber optic connector and the engaging portion is in an unlocked position, and when the lever is rotated into a second position, the fiber optic connector is freely insertable into the receptacle and the locking member is in a locked position.

2. The pluggable transceiver according to Claim 1,

wherein the engaging portion comprises a cam, and

wherein the locking member further comprises a shaft fixedly connected between the lever and the cam.

3. The pluggable transceiver according to Claim 2, wherein the housing includes a lower wall, and the release mechanism further comprises a snap-coupling structure formed on the lower wall for securing the shaft to the housing, wherein the lower wall further defines a recess for receiving the cam, wherein a contact structure of the cam extends from the lower wall of the housing when the engaging member is in the locked position, and the contact structure is retracted into the recess when the engaging member is in the unlocked position.

4. The pluggable transceiver according to Claim 2, wherein the lever comprises a flat body defining a plane that is connected along one edge to the shaft.

5. A pluggable transceiver comprising:

a housing having a front wall defining a receptacle for receiving a fiber optic connector, and a lower wall defining a recess; and

a release mechanism including:

a lever rotatably mounted on the housing and extending from the front wall, and

a cam connected to the lever and mounted in the recess,

wherein the lever and cam are arranged such that manual rotation of the lever from a first position to a second position causes a contact structure of the cam to protrude from the lower wall of the housing, and rotation of the lever from the second position to the first position causes the contact structure to retract into the recess.

6. The pluggable transceiver according to Claim 5, wherein the lever includes a flat body that is perpendicular to the lower wall when the lever is in the first position, and that is parallel to the lower wall when the lever is in the second position.

7. The pluggable transceiver according to Claim 5, wherein the release mechanism further comprises a shaft connected between the lever and the cam.

8. The pluggable transceiver according to Claim 7, wherein the release mechanism further comprises a snap-coupling

structure formed on the lower wall of the housing for rotatably securing the shaft to the housing.

9. The pluggable transceiver according to Claim 8, wherein the shaft includes self-alignment ring that contacts the snap-coupling structure to prevent movement of the release mechanism along an axis defined by the shaft relative to the housing.

10. The pluggable transceiver according to Claim 7, wherein the cam includes an arm fixedly connected to an end of the shaft, wherein the contact structure is mounted on an end of the arm.

11. The pluggable transceiver according to Claim 10, wherein the curved cam structure defines a clearance groove.

12. A pluggable transceiver comprising:
a housing having a front wall defining a receptacle for receiving a fiber optic connector, and a lower wall including a snap-coupling structure; and

a locking member including:

a shaft rotatably coupled to the snap-coupling structure,

a lever connected to a first end of the shaft
and extending from the front wall of the housing, and
an engaging portion connected to a second end of the shaft,

wherein rotation of the lever into a first position is transmitted by the shaft to rotate the engaging portion into an unlocked position, and rotation of the lever into a second position is transmitted by the shaft to rotate the engaging portion into a locked position.

13. The pluggable transceiver according to Claim 12, wherein the lever comprises a flat body having an edge that is aligned with an axis defined by the shaft.

14. The pluggable transceiver according to Claim 13, wherein when the lever is rotated into the first position, a plane defined by the flat body is perpendicular to a plane defined by the bottom surface of the housing, and when the lever is rotated into the second position, the plane defined by the flat body is parallel to a plane defined by the bottom surface of the housing.

15. The pluggable transceiver according to Claim 12, wherein the engaging portion comprises a cam fixedly mounted on the shaft.

16. A transceiver assembly comprising:
a cage defining a front opening and including a lower wall having a resilient transceiver latch; and
a pluggable transceiver removably insertable into the front opening of the cage, the pluggable transceiver including:

a housing having a front wall defining a receptacle for receiving a fiber optic connector, and a lower wall including a boss positioned to engage the transceiver latch when the pluggable transceiver is fully inserted into the cage, and

a release mechanism including a locking member rotatably connected to the housing, the locking member including a lever extending from the front wall of the housing, and an engaging portion fixedly connected to the lever,

wherein the locking member is arranged such that manual rotation of the lever from a first position to a second

position causes the engaging portion to push the transceiver latch away from the lower wall of the housing, thereby disengaging the boss from the transceiver latch, and rotation of the lever from the second position to the first position causes the engaging portion to move away from the transceiver latch, thereby causing the transceiver latch to engage the boss.

17. The transceiver assembly according to Claim 16, wherein the engaging portion comprises a cam, and wherein the locking member further comprises a shaft fixedly connected between the lever and the cam.

18. The transceiver assembly according to Claim 17, wherein the release mechanism further comprises including a snap-coupling structure formed on the lower wall of the housing for securing the shaft to the housing,

wherein the lower wall defines a recess for receiving the cam, and

wherein the cam extends from the lower wall of the housing when the engaging member is in the locked position, and the cam is retracted into the recess when the engaging member is in the unlocked position.

19. The transceiver assembly according to Claim 17, wherein the lever comprises a flat body defining a plane that is connected along one edge to the shaft.

20. The transceiver assembly according to Claim 19, wherein the locking mechanism is arranged such that when the lever is rotated into the first position, the flat body blocks at least a portion of the receptacle to prevent insertion of the fiber optic connector, and when the lever is rotated into

the second position, the flat body is rotated downward such that the fiber optic connector is freely insertable into the receptacle.